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EXAMINER	
DUNCAN, MARC M	

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/853,371	STEPHENSON ET AL.	
	Examiner	Art Unit	
	Marc M Duncan	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46 and 48-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,13-20,23,24,26-31,35,37-39,44-46 and 48-60* is/are rejected.

7)☒ Claim(s) *12,21,22,25,32-34,36 and 40-43* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 July 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

Claim 49 is rejected under 35 U.S.C. 112, second paragraph.

Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 26, 27, 28, 29, 30, 31, 35, 38, 39, 44, 45, 46, 48, 49, 51, 52, 53, 54, 55, 56 and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Scott et al.

Claims 50, 58 and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardiner et al.

Claims 37 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al.

Claims 12, 21, 22, 25, 32, 33, 34, 36, 40, 41, 42 and 43 are objected to.

Allowable Subject Matter

The indicated allowability of claims 12, 15, 16, 19, 24, 26, 30, 31, 34, 36, 37 and 47 in the previous office action is withdrawn in view of the newly discovered reference(s) to Scott et al. and Gardiner et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 49 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 49 recites the limitation "said consoles" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims are rejected under 35 U.S.C. 102(e) as being anticipated by Scott et al.

Regarding claim 1:

Scott teaches periodically monitoring performance characteristics of resources used by a multi-tiered client/server application with one or more sensors in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1. The software utilized on the system of Fig. 1 is a multi-tiered client/server application.

Scott teaches collecting information form said one or more sensors with one or more controllers and applying rule-based criteria to said information to determine the performance and/or availability of said resources or services in col. 1 lines 48-54, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50.

Scott teaches modifying the behavior of said multi-tiered client/server application with one or more actuators, based on a comparison of said monitored performance

characteristics to one or more predetermined values in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 2:

Scott teaches wherein said comparison indicated that a particular action by a user of said application will result in an error or degraded performance in col. 7 lines 48-53. The action by the user of requesting a certain page from an application server that is not responding would cause an error or severely degraded performance.

Regarding claim 3:

Scott teaches wherein the user interface of said application is modified in the Abstract lines 11-15. The examiner is interpreting the term user interface to encompass all parts of the interface between the user and the requested data, thereby including the connections that are made through to the application server, and not solely a graphical user interface.

Regarding claim 4:

Scott teaches wherein the functionality of the application is curtailed in col. 2 lines 10-16 and col. 7 lines 48-53. If a particular application server is restarted and therefore unable to be used, the functionality of the overall application is curtailed.

Regarding claim 5:

Scott teaches one or more sensors configured to check the availability and/or performance of resources required by a multi-tiered client/server application in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1. The software utilized on the system of Fig. 1 is a multi-tiered client/server application.

Scott teaches one or more controllers configured to collect information from said one or more sensors and apply rule-based criteria to said information to determine the performance and/or availability of said resources in col. 1 lines 48-54, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50.

Scott also teaches one or more actuators configured to modify the behavior of said multi-tiered client/server application based on information collected by said one or more controllers in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 6:

Scott teaches one or more consoles in col. 1 line 63. Scott teaches a user. In order for a user to be involved the system necessarily includes one or more consoles.

Regarding claim 7:

Scott teaches wherein the sensors measure performance characteristics of various components of said multi-tiered client/server application in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1.

Regarding claim 8:

Scott teaches wherein said measurements are communicated to said one or more controllers in col. 1 lines 46-47 and col. 7 lines 39-50.

Regarding claim 9:

Scott teaches wherein said one or more controllers decide upon a course of action based on measurements of performance characteristics of components of said multi-tiered client/server application in col. 1 lines 53-58 and col. 7 lines 39-50.

Regarding claim 10:

Scott teaches wherein said one or more controllers apply rules to modify the behavior of said application in col. 1 lines 53-58, lines 64-65 and col. 7 lines 39-50.

Regarding claim 11:

Scott teaches wherein said rules can be built-in or user-defined in col. 1 lines 62-65 and col. 7 line 48.

Regarding claim 13:

Scott teaches wherein said one or more controllers send information to said console for output to a user of said application in col. 7 lines 50-53.

Regarding claim 14:

Scott teaches wherein said one or more controllers send messages to said one or more actuators to effect modification of the behavior of said application in col. 1 lines 50-52 and col. 7 lines 49-50.

Regarding claim 15:

Scott teaches wherein said one or more sensors are embedded in the application code of said various components of said application. This limitation is inherent to the function of the system of Scott. Because all the components of the system are software controlled and software does all of the measurements of the system of Scott, the sensors must necessarily be embedded in the application code.

Regarding claim 16:

Scott teaches wherein said one or more sensors utilize software calls to an operating system supporting the execution of said various components of said application. This limitation is inherent to the function of the system of Scott. Because

all the components of the system are software controlled and software does all of the measurements of the system of Scott, the sensors must necessarily utilize the claimed software calls in order to function in the system of Scott.

Regarding claim 17:

Scott teaches wherein said one or more sensors are installed on a network and access said various components on said application as a client in col. 7 lines 39-50.

Regarding claim 18:

Scott teaches wherein said one or more sensors measure the response time and availability of various external resources or services required by said various components of said application in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1.

Regarding claim 19:

Scott teaches wherein a single component of said application is monitored by a plurality of said sensors in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1. Each measurement requires a separate sensor.

Regarding claim 20:

Scott teaches wherein said sensors utilize existing performance information in col. 1 lines 62-64.

Regarding claim 23:

Scott teaches wherein said one or more controllers can modify the behavior of said one or more sensors in col. 1 lines 59-60. Changing the polling interval modifies the behavior of the sensors.

Regarding claim 24:

Scott teaches wherein said one or more controllers can specify the frequency by which said one or more sensors monitor performance characteristics of various components of said application in col. 1 lines 59-60.

Regarding claim 26:

Scott teaches wherein said one or more controllers can specify the manner in which said one or more sensors communicate said performance characteristics to said one ore more controllers in col. 1 lines 59-60. Changing the polling interval is equivalent to specifying the manner in which the sensors communicate with the controllers.

Regarding claim 27:

Scott teaches wherein the actuators may effect modification of the behavior of discrete components of said application in col. 1 lines 10-16. Each application server and the software controlling it represent a discrete component of the application.

Regarding claim 28:

Scott teaches wherein said actuators may modify the user interface of said application in the Abstract lines 11-15. The examiner is interpreting the term user interface to encompass all parts of the interface between the user and the requested data, thereby including the connections that are made through to the application server, and not solely a graphical user interface.

Regarding claim 29:

Scott teaches wherein said actuators may restrict the functionality of said application in col. 2 lines 10-16 and col. 7 lines 48-53. If a particular application server is restarted and therefore unable to be used, the functionality of the overall application is curtailed.

Regarding claim 30:

Scott teaches wherein said actuators may be embedded in the code of said application. This limitation is inherent to the function of the system of Scott. Because all the components of the system are software controlled, the actuators must necessarily be embedded in the application code.

Regarding claim 31:

Scott teaches wherein a plurality of actuators may be utilized to modify the behavior of one or more components of said application in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50. The presence of more than one application server requires more than one actuator to effect a restart or a masking of each server individually.

Regarding claim 35:

Scott teaches wherein a single controller is utilized in Fig. 1.

Regarding claim 38:

Scott teaches wherein information regarding the performance of said application is displayed on said console in col. 7 lines 50-53.

Regarding claim 39:

Scott teaches wherein a user of said system can enter specific rules at said console to be applied by said one or more controllers to modify the behavior of said application in col. 1 line 63, line 66 and col. 7 line 48.

Regarding claim 44:

Scott teaches wherein said console displays messages and alerts generated by said system in col. 7 lines 50-53.

Regarding claim 45:

Scott teaches one or more sensors for checking the availability and performance of external resources or services required by various components of a multi-tiered client/server application running on a standard computer system in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1. The software utilized on the system of Fig. 1 is a multi-tiered client/server application.

Scott teaches one or more controllers for collecting information from said one or more sensors and applying rule-based criteria to said information to determine the performance and/or availability of said resources or services in col. 1 lines 48-54, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50.

Scott teaches one or more actuators for modifying the behavior of said multi-tiered client/server application, based on information collected by said one or more controllers in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 46:

Scott teaches wherein said multi-tiered client/server application may be web-based in Fig. 1.

Regarding claim 48:

Scott teaches wherein said resources and said services may be supplied by system connected via a network in Fig. 1.

Regarding claim 49:

Scott teaches wherein said sensors, controllers, actuators and consoles communicate via said network in Fig. 1.

Regarding claim 51:

Scott teaches one or more sensors wherein said sensors measure performance characteristics of various components of an application and wherein said one or more sensors are embedded in the application code of said various components of said application in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1. Because all the components of the system are software controlled and software does all of the measurements of the system of Scott, the sensors must necessarily be embedded in the application code.

Scott teaches one or more controllers in col. 1 lines 48-54, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50.

Scott teaches one or more actuators in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 52:

Scott teaches one or more sensors wherein said sensors measure performance characteristics of various components of an application and wherein said one or more sensors utilize software calls to an operating system supporting the execution of said

various components of said application in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1. Because all the components of the system are software controlled and software does all of the measurements of the system of Scott, the sensors must necessarily utilize the claimed software calls in order to function in the system of Scott.

Scott teaches one or more controllers in col. 1 lines 48-54, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50.

Scott teaches one or more actuators in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 53:

Scott teaches one or more sensors wherein said sensors measure performance characteristics of various components of an application and wherein a single component of said application is monitored by a plurality of said sensors in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1. Each measurement requires a separate sensor.

Scott teaches one or more controllers in col. 1 lines 48-54, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50.

Scott teaches one or more actuators in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 54:

Scott teaches one or more sensors in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1.

Scott teaches one or more controllers wherein said one or more controllers can modify the behavior of said one or more sensors and said one or more controllers can

specify the frequency by which said one or more sensors monitor performance characteristics of various components of said an application in col. 1 lines 48-54, lines 59-60, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50.

Scott teaches one or more actuators in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 55:

Scott teaches one or more sensors wherein said sensors measure performance characteristics of various components of said application in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1.

Scott teaches one or more controllers wherein said performance characteristics are communicated to said one or more controllers and wherein said one or more controllers can specify the manner in which said one or more sensors communicate said performance characteristics to said one or more controllers in col. 1 lines 48-54, lines 59-60, lines 64-65, col. 2 lines 4-9 and col. 7 lines 48-50. Changing the polling interval is equivalent to specifying the manner in which the sensors communicate with the controllers.

Scott teaches one or more actuators in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50.

Regarding claim 56:

Scott teaches one or more sensors in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1.

Scott teaches one or more controllers wherein said one or more controllers decide upon a course of action based on measurements of performance characteristics on an application in col. 1 lines 48-58, lines 64-65, col. 2 lines 4-9 and col. 7 lines 39-50.

Scott teaches one or more actuators wherein said one or more controllers send messages to said one or more actuators to effect modification of the behavior of said application and wherein said actuators may be embedded in the code of said application in col. 1 lines 50-52 and col. 7 lines 49-50. Because all the components of the system are software controlled, the actuators must necessarily be embedded in the application code.

Regarding claim 57:

Scott teaches one or more sensors in col. 1 lines 45-47, lines 55-60, col. 7 lines 37-39 and Fig. 1.

Scott teaches one or more controllers wherein said one or more controllers decide upon a course of action based on measurements of performance characteristics on an application in col. 1 lines 48-58, lines 64-65, col. 2 lines 4-9 and col. 7 lines 39-50.

Scott teaches one or more actuators wherein said one or more controllers send messages to said one or more actuators to effect modification of the behavior of said application and wherein a plurality of actuators may be utilized to modify the behavior of one or more components of said application in col. 1 lines 50-52, col. 2 lines 4-9 and col. 7 lines 48-50. The presence of more than one application server requires more than one actuator to effect a restart or a masking of each server individually.

Claims 50, 58 and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardiner et al.

Regarding claim 50:

Gardiner teaches one or more sensors in col. 3 lines 11-14.

Gardiner teaches one or more controllers wherein said one or more controllers decide upon a course of action based on measurements of performance characteristics of components of said application and wherein said one or more controllers generate messages to other of said one or more controllers in col. 4 lines 25-28 and Fig. 1. Each FME contains a controller.

Gardiner teaches one or more actuators in col. 3 lines 11-25.

Regarding claim 58:

Gardiner teaches one or more sensors in col. 3 lines 11-14.

Gardiner teaches one or more controllers wherein said one or more controllers decide upon a course of action based on measurements of performance characteristics of components of said application in col. 4 lines 25-28 and Fig. 1. Each FME contains a controller.

Gardiner teaches one or more actuators wherein said one or more controllers send messages to said one or more actuators to effect modification of the behavior of said application and wherein a single component of said application may be affected by a plurality of actuators in col. 3 lines 11-25. Each component has both an error handler and a fault handler.

Regarding claim 59:

Gardiner teaches one or more sensors in col. 3 lines 11-14.

Gardiner teaches one or more controllers wherein a plurality of controllers arranged in a master/slave hierarchy are utilized in Fig. 1.

Gardiner teaches one or more actuators in col. 3 lines 11-25.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 37 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al.

Regarding claims 37 and 60:

The teachings of Scott are outlined above.

Scott does not explicitly teach processors arranged in a process group. Scott does, however, teach multiple load managers.

The examiner takes official notice that process groups were well known and widely used by those of ordinary skill in the art at the time of applicant's invention.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the multiple load managers of Scott with the concept of a process group.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because the system of Scott, which manages connections of a web based application based on the load characteristics gathered and processed by the load managers, has an inherent need for the state of the information of the load managers to be consistent and coherent. If the states of the various load managers were not consistent and coherent, the system of Scott could not function properly and any benefit of load management would easily be lost. A process group meets the inherent need of Scott for a coherent and consistent state among the multiple load managers.

Allowable Subject Matter

Claims 12, 21, 22, 25, 32, 33, 34, 36, 40, 41, 42 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art was not found that explicitly teaches or fairly suggests wherein said one or more controllers generate messages to other of said one or more controllers as

outlined in claim 12. Prior art was not found that explicitly teaches or fairly suggests wherein said sensors monitor performance characteristics explicitly identified by said user as outlined in claim 21. Prior art was not found that explicitly teaches or fairly suggests wherein said sensors can be generated and placed by said system as outlined in claim 22. Prior art was not found that explicitly teaches or fairly suggests wherein said one or more controllers can specify the type of performance characteristics to be monitored as outlined in claim 25. Prior art was not found that explicitly teaches or fairly suggests wherein multiple instances of an actuator may be deployed across replicated instances of external resources or services as outlined in claim 32. Prior art was not found that explicitly teaches or fairly suggests wherein a single component of said application may be affected by a plurality of actuators as outlined in claim 34. Prior art was not found that explicitly teaches or fairly suggests that the plurality of controllers is arranged in a master/slave hierarchy as outlined in claim 36. Prior art was not found that explicitly teaches or fairly suggests wherein said console may communicate directly with said one or more sensors as outlined in claim 40. Prior art was not found that explicitly teaches or fairly suggests wherein said console may communicate directly with said one or more actuators as outlined in claim 41. Prior art was not found that explicitly teaches or fairly suggests wherein said console may communicate with said one or more sensors or said one or more actuators through said one or more controllers as outlined in claim 42. Prior art was not found that explicitly teaches or fairly suggests wherein a user can enable or disable individual ones of said one or more sensors or said one or more actuators as outlined in claim 43. These limitations are considered

allowable only when taken in combination with all limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-46 and 48-60 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not relied upon contains elements of the instant claims and/or represents a current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc M Duncan whose current telephone number is 703-305-4622. The examiner's telephone number as of October 15th, 2004 will be 571-272-3646. The examiner can normally be reached on M-T and TH-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 703-305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

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